

ABSTRACT

To provide a mold capable of manufacturing a metal-ceramic composite member in which a predetermined number of ceramic members
5 are joined onto a large joining metal, the large joining metal being free from swell and shrinkage cavity on the surface thereof and high in dimensional precision. A metal-ceramic composite member 3 according to this embodiment is manufactured in such a manner that a predetermined number of metal-ceramic bonded substrates 30 are placed in a mold main body 11
10 constituting a mold 1, with a ceramic substrate 31 side thereof facing upward, an atmosphere inside and outside the mold 1 is replaced with an inert gas such as a nitrogen gas from the atmosphere, a molten metal 42 is poured and filled in a first joining portion 14 that is formed by the molten metal main body 11 and an upper container 13 and that has a shrinkage cavity inducing
15 portion 16 on a metal material holding portion side and a shrinkage cavity inducing portion 18 on an air vent side, and the molten metal 42 is cooled.